2000 Water Quality Report

Chippewa Falls Water Department June 2001

Our Water Quality And What It Means

We're pleased to present you the 2000 Water Quality Report. This annual report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continuously improve the water quality and protect our water resources. We are committed to ensuring the quality of your water.

The year 2000 saw your Water Department taking steps to ensure the ability to provide a safe and ample supply of drinking water to the citizens of Chippewa Falls. Several areas of operation and maintenance were reviewed and some activities are summarized here:

- On October 3, 2000 the City Council approved continuous chlorination. Chippewa Falls became the last public water supply in Wisconsin, serving over 10,000 customers, to provide continuous disinfection of the drinking water.
- A unidirectional flushing program of water mains and hydrants was initiated in the summer of 2000 and will continue annually. This is more effective, than the conventional flushing previously used, in removing sediment and biofilms that could degrade water quality.
- To increase security and protection of the source water, well houses will be constructed in the summer of 2001 around East Wells 1-4 and existing piping will be rerouted so all chemicals are injected after the nitrate removal process.
- The Water Departments backflow/cross connection inspection program was reviewed. Inspection for all possible sources of contamination was increased.
- All 3 elevated storage tanks were inspected in 2000. Routine painting, minor structural modifications and maintenance items not directly affecting water quality will commence starting in the summer of 2001 with work on the East Hill Tank. The West Hill and South Hill Tanks will be repainted in 2002 and 2003.

Questions or Comments

If you have any questions about this report or concerning your water utility, please contact John Allen, Utility Manager at 726-2741 or Steve Frank, Water Supervisor at 720-6981.

Getting Involved

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council or Board of Public Works Committee meetings. Please call for meeting times, locations and agendas.

Where does our Water Come From?

Chippewa Falls relies exclusively on groundwater from 8 drilled wells for it's municipal water supply. All of the wells are drilled to a depth of approximately 40' - 90' into a sand and gravel drift formation. The West Well Field has 2 wells and is located at 100 Tilton Road. The East Well Field has 6 wells and is located at 1350 Pumphouse Road.

The City of Chippewa Falls has developed a Wellhead Protection (WHP) Plan. The goal of WHP planning is to control activities within the Zone Of Contribution to a municipal well to prevent contamination of Groundwater. Copies of the City's ordinance or the WHP plan are available at our office.

Monitoring Results

The Chippewa Falls Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2000 and any previous detects.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Substances Detected in Chippewa Falls Water

TEST RESULTS							
Substance (units)	Violation Y/N	Level Detected	Range	Date of Sample (if prior to 2000)	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Coliform (TCR)	No	1			0	Presence of coliform bacteria >=5% of monthly samples	Naturally present in the environment.
Inorganic Contaminants							
Barium (ppm)	No	.013	.011 - .013	10/04/1999	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (ppm)	No	.1550	.1550	12/31/1999	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	No	7.83	7.83	12/31/1999	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel (ppb)	No	4.0000	0.0000 - 4.0000	10/04/1999		100	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate (as Nitrogen) (ppm)	No	4.31 (average)	1.20 - 9.08		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	9.83	8.21 - 9.83	10/04/1999	n/a	n/a	n/a
Unregulated Contaminants							
Sulfate (ppm)	No	7.43	6.71 - 7.43	10/04/1999	n/a	n/a	n/a
Volitile Organic Contaminants							
Dichlormethane (ppb)	No	0.5	0.5		0	5	Discharge from pharmaceutical and chemical factories

Definitions

The following definitions will help you understand terms and abbreviations you might not be familiar with.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present

Parts per million (ppm) *or* ***Milligrams per liter (mg/l)*** - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) *or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" ***(MCL)*** is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal"**(MCLG)** is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

What Does This Mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

Microbiology

Microbial or microbiological organisms such as viruses and bacteria may come from leaking sewer mains, septic systems, agricultural livestock operations and wildlife. These are not likely sources of contamination of a groundwater supply such as Chippewa Falls. It is possible, however, for microbes to enter a well from surface water or a shallow groundwater source if there is inadequate wellhead protection, or to contaminate water in the distribution or building plumbing system. The microbiological tests we perform (15 per month) analyze water for the presence of indicator organisms called "coliform bacteria." Presence of indicator organisms does not necessarily mean there is a health risk. If the indicator is detected, however, there is a possibility that pathogenic (disease causing) organisms could be present.

Water and Health

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Nitrates

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Lead

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Rates

Water - Effective June 1, 1998

Meter Size	Qtrly Charge	Monthly Charge
5/8 & 3/4	$16.88	$5.63
1	$23.92	$7.97
1 ½	$39.39	$13.13
2	$61.90	$20.63
3	$126.62	$42.21
4	$196.96	$65.65
6	$393.92	$131.31
8	$619.00	$206.34
10	$844.10	$281.37

Water Volume

Each Quarter	Each Month	
First 30 CCF	10 CCF	$1.09 per CCF
Next 970CCF	323 CCF	$.95 per CCF
Next 4,000 CCF	1,333 CCF	$.81 per CCF
Over 5,000 CCF	1,666 CCF	$.50 per CCF

Wastewater - Effective April 1, 1997

Base Charge	$7.76
Usage Charge	$1.70 per CCF

Wastewater Usage Charge Breakdown

Operation and Maintenance	$1.34
Debt Service	.36
Total Charge	$1.70

7.48 Gallons = 1 Cubic Foot
100 Cubic Feet = 1 CCF

Contaminants and Drinking Water

"All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or is man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials."

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's **Safe Drinking Water Hotline at 1-800-426-4791.**
MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.